

### **REMARKS**

By this Amendment, claims 55-68 have been amended. New claims 73-86 have been added, of which claims 81 and 85 are independent claims and the remainder dependent claims. Claims 69-72 have been canceled by this amendment and, as a reminder, Claims 1-54 were previously canceled. Reconsideration and allowance of this application are respectfully requested.

The claims have been amended, *inter alia*, to more clearly recite embodiments of Applicant's invention in which a current transmission path (or node) is changed after an elapsed time ("after some specified amount of time passes" *Specification*, pg. 13, line 24).

While Applicant has shown exemplary support for the various amendments in the application as filed, it should be understood that the claims are not to be limited in any way by the examples shown. It should further be appreciated that the words "first" and "second" in the claims are used to distinguish and/or identify, and not to show a serial or numerical limitation.

It should be appreciated that the Applicant has not invoked 35 U.S.C. §112, paragraph 6 with respect to any term in any claim of the present application.

No new matter has been added by these amendments.

Claims 55-68 and 73-86 are pending in this application.

### **THE PRIOR ART REJECTIONS**

#### **Rejections based on Spiegel and Jonas**

The Examiner rejected claims 55, 57-61, and 63-72 under 35 U.S.C. §103(a) as being unpatentable over Spiegel et al. (U.S. Pat. No. 5,649,108, hereinafter "Spiegel"), and further in view of Jonas et al. (U.S. Pat. No. 6,137,792, hereinafter "Jonas"). In particular, the Office Action states that Spiegel fails to teach selectively routing transmissions from a source node to a first network and to a second network, and therefore the Examiner applies Jonas to teach this

“network” deficiency in support of the instant obviousness-type rejections. Even though the independent claims are hereby amended to replace selectively choosing between a first and second “network” with first and second “path,” the claims were not amended to distinguish Jonas. Indeed, new claims 77-80 recite “wherein a first network comprises the first path and a second network comprises the second path,” and therefore recite the limitations that the Office Action relies on for the instant §103(a) rejections in view of Jonas.

Generally speaking, each claim now recites at least one embodiment of Applicant’s invention in which a table that causes content to be routed to a first path is modified (or configurable to be modified) after an elapsed amount of time to cause content to be routed to a second path. Neither Spiegel nor Jonas has any notion of selecting a new path based on how much time has elapsed since the current path was selected or on how much the current path has been used. Even further, Spiegel and Jonas are directed to entirely different methods of path or network selection, respectively, that would suggest to one of skill in the art a complete solution, thereby lacking motivation to engage in the approach recited in the claims of the present application.

First, Spiegel is directed to an ATM network over which virtual circuits are implemented in order to route data between endpoints on the ATM network. Spiegel describes a process by which the virtual circuits are established throughout the network based on quality of service considerations. The only method taught by Spiegel for initiating creation of a virtual circuit involves the receipt of a connection setup packet to create the circuit in the first place. Spiegel does not teach a process by which an elapsed period of time initiates the virtual circuit determination process and, due to the teaching of the connection setup packets, actually teaches away from such a procedure by requiring a new virtual circuit to be created each time a connection setup packet is received. By requiring such a repetitive procedure for each new connection setup packet, Spiegel’s approach

involves processing drawbacks solved by the embodiments of Applicant's invention recited in the claims of the present application. In addition to failing to provide support for a proper anticipatory rejection of any pending claim, Spiegel thus also fails as a reference sufficient to establish a *prima facie* case of obviousness.

Second, Jonas relates to an approach in which both the Internet and an alternative to the Internet are contemplated for use in data transmission, depending on user preferences. Realizing that certain forms of data are more time critical (*Jonas*, Col. 3, ll. 4-23) or require added protection from packet sniffing and piracy (*Jonas* Col. 2, ll. 1 *et seq.*) than what the Internet can provide, Jonas focuses on a process by which a user can elect to send certain types of data over a low latency and relatively more secure network called a "bypass network."

The following passages highlight the motivations behind Jonas' approach to network selection and the problems to be solved thereby:

- *Jonas*, Col. 2, line 64 to Col. 3, line 3: "there exists a need ... to enable computer users communicating across the Internet to transmit at least a portion of the communication across a network having a low initial connection cost, such as a circuit-switched public phone network or a circuit-switched interface to a secure packet-switched network."
- *Jonas*, Col. 4, lines 13-20: "Normally, hosts 1 and 2 would transmit data to each other through routers 20 and 21 over the Internet 40. Occasionally, however, **the transmitting host may wish** to transmit secret data over the bypass circuit-switched telephone network 30. **The host may also wish** to transmit via the bypass network if the delay time over available paths on the Internet is unacceptable, such as for interactive or other time-critical applications.",(Emphasis Added)
- *Jonas*, Col. 3, lines 32-33: "provid[es] a bypass mechanism for secret and/or critical data traffic which requires minimal transmission delay".

Plainly stated, Jonas' approach involves a user *pre-designating* certain content (packets) to go over the bypass network instead of over the Internet.

*Jonas*, col. 4, lines 17-20. Such pre-designation technically defeats the purpose of implementing network selection based on elapsed time. Whereas the embodiments of Applicant's invention recited in the claims of the present application direct transmissions to a specified path (or network in the case of dependent claims 77-80), *Jonas'* motivation to provide users with control over network selection would circumvent these embodiments and effectively render it meaningless. Likewise, application of the embodiments recited in the pending claims obviates the need for user pre-designation of a network (or path) and, thus, would defeat the purpose of *Jonas'* teaching in the first place. Regardless of the analysis, the pending claims and *Jonas* simply provide distinct solutions and, quite frankly, contradict one another.

Since *Jonas* and *Spiegel* both lack any teaching or suggestion of at least the elapsed time aspects claimed in the present application, the proposed combination of *Spiegel* with *Jonas* (inasmuch as such a combination is even possible) fails to provide support for a *prima facie* case of obviousness over any pending claim in the present application.

For at least these reasons, all pending claims of the present application are believed as patentable over *Spiegel* and *Jonas*. In addition, new dependent claims 73-76 recite that "the communications network comprises the Internet and wherein communication among nodes on the first path uses Internet protocols, and communication among nodes on the second path uses Internet protocols."

Nodes in *Jonas'* bypass network cannot communicate with Internet nodes using the same network protocol used *within* each of the two networks. *Jonas* describes and requires special routers (20, 21 in Fig. 1) to interface between the hosts and the two networks. *Jonas* requires that all access to the bypass network be via the specialized routers. Nodes in *Jonas'* first network (the Internet) do not and cannot communicate with nodes in *Jonas'* second network (the bypass network). Host-to-host communication in *Jonas* takes place either from

*host*⇒*router*⇒*Internet*⇒*router*⇒*host* or from *host*⇒*router*⇒*bypass network*⇒*router*⇒*host*. But no communication can take place in Jonas between the Internet and the bypass network.

**Rejections based on Spiegel, Jonas and Kamm**

Applicant agrees with the Office Action that Spiegel and Jonas fail to teach an overlay network. *Office Action of 12/04/2009*, at page 9 (“Spiegel and Jonas fail to teach the first network is an overlay network.”). Because of this deficiency, the Office Action cites Kamm et al. (U.S. Patent No. 5,457,680, hereinafter “Kamm”) as teaching an overlay network and combines Kamm with Jonas and Spiegel to support the rejections to claims 56 and 62 under 35 U.S.C. § 103(a). First and foremost, claims 56 and 62, which now recite the first path being a forwarding path on an overlay network, and new claims 83 and 84, which recite an “overlay” node, are believed patentable over the triple combination of Spiegel-Jonas-Kamm for at least the aforementioned deficiencies in the underlying combination of Spiegel-Jonas. Secondly, the combination of Kamm with Spiegel and/or Jonas is improper and would not be suggested to one of ordinary skill in the art.

According to the Examiner (*Office Action of 12/04/2009*, Section 15, pgs. 9-10, with emphasis added):

Kamm, in the same field of endeavor having closely related objectivity, teaches overlay network [Col. 2, L. 52-53]. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Kamm's teachings of [sic] overlay network, with Jonas's teachings of transmission from the source node to the destination node to be routed from the source node to a first network ... transmission from the source node to the destination node to be routed from the source node to a second network, in the teachings of Spiegel in combined progressive and source routing control for connection-oriented communications networks, for the purpose of help to [sic] selecting the appropriate network based on the static and dynamic

*information about the plurality of network [sic] and timer [sic], thereby enabling data transmission through the appropriate network.*

Kamm is not, as the Examiner would have it, “in the same field of endeavor having closely related objectivity” as either of the other two references. Spiegel “relates generally to network routing, and more specifically to multipath routing control for connection-oriented networks such as asynchronous transfer mode (ATM) networks using progressive or originating control protocols.” *Spiegel*, col. 1, lines 8-13. Jonas relates to “routing and transmitting data packets over a bypass circuit-switched telephone network from a source computer coupled to a packet-switched computer network via a source router and a destination computer coupled to said packet-switched computer network via a destination router.” *Jonas, Abstract.*

Kamm, on the other hand, relates to mobile cellular telephony and describes a data gateway for *mobile data radio terminals*. More specifically, Kamm relates to “communication of data packets between a mobile data radio terminal and a plurality of fixed base stations in a data communications network.” *Kamm, Abstract.*

Whereas Spiegel and Jonas pertain to terrestrial, wide area networks, Kamm pertains to the opposite—wireless, local area networks. As such, a person of skill in the art at the time of the present invention would not have considered Spiegel or Jonas to be in the same field as Kamm. Furthermore, as with Spiegel and Jonas, the Office Action fails to set forth any objective evidence supporting the contention that the combination of Spiegel and Jonas and Kamm is proper and, therefore fails to support a *prima facie* case of obviousness. In its *KSR* decision, the Supreme Court advised against such improper and unsupported rationale. Quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), the Supreme stated that “[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with

some **rational underpinning** to support the legal conclusion of obviousness.””  
*KSR*, 550 U.S. at 418 (emphasis added).

While *KSR* arguably loosened the requirements for the Office to find obviousness, it did not give the Office a blank check to make up rationale for combining or modifying references, but instead promulgated guidelines for conducting what the Supreme Court intends to be an objective analysis of factual inquiries – the key words being **objective** and **factual**, not subjective and conclusory. Based on these guidelines, the MPEP even specifically enumerates the following exemplary rationales that “may” support a *prima facie* case of obviousness in the context of an Office Action.

- (A) Combining prior art elements according to known methods to yield **predictable results**;
- (B) Simple substitution of one known element for another to obtain **predictable results**;
- (C) Use of known technique to **improve** similar devices (methods, or products) in the same way;
- (D) Applying a known technique to a known device (method, or product) ready for improvement to yield **predictable results**;
- (E) “Obvious to try” – choosing from a finite number of identified, **predictable solutions**, with a reasonable expectation of success;
- (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations are **predictable** to one of ordinary skill in the art;
- (G) **Some teaching, suggestion, or motivation in the prior art** that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention. (Emphasis added)

*MPEP 2141, III. RATIONALES TO SUPPORT REJECTIONS UNDER 35 U.S.C. 103.*

The Office Action summarily provides alleged motivation and no predictability to support the combination of Spiegel and Jonas and Kamm without specifically enumerating objective evidence. With regard to rationales A, B, D, E, and F (from *MPEP* 2141, listed above), there is no statement or objective evidence of predictability.

With regard to rationales C and G (from *MPEP* 2141, listed above), the Examiner's "for the purpose of ..." statement is purely conclusory, and does not specifically address the allegedly missing link of Spiegel purportedly provided in Jonas. In the absence of any objective evidence, to make the mental leap from merely stating an advantage (*"for the purpose of help to [sic] selecting the appropriate network based on the static and dynamic information about the plurality of network [sic] and timer [sic], thereby enabling data transmission through the appropriate network"*) to suggesting a specific approach to accomplish such advantage could only be gleaned from subjective rationale based on hindsight.

For at least these reasons, the purported combination of Spiegel-Jonas-Kamm fails to provide support for a *prima facie* case of obviousness and is respectfully believed improper. Accordingly, the merits of the disclosure of Kamm in connection with overlay networks are not addressed herein. Such silence should not be considered Applicant's acquiescence to or admission of the Examiner's understanding or description of these teachings in the Office Action, and Applicant reserves the right to address such merits at a later time, if appropriate.

#### **The Examiner's Response to Previous Arguments**

In the section titled "Response to Arguments" of the present Office Action, the Examiner states:

Applicant's arguments filed 7/31/09 have been fully considered but they are not persuasive.

Applicant's arguments with respect to claims 55-72 have been considered but are moot in view of the new ground(s) of rejection.

The Examiner is respectfully requested to clarify which aspect of Applicant's response was not persuasive. In its 07/31/2009 response, Applicant pointed out that the Examiner's "prior art" rejections were all based on a reference that is not prior art with respect to the present application (Koyanagi et al., U.S. Patent No. 7,187,658). Applicant made no other arguments with respect to the pending claims as the Examiner had not made a proper rejection of the claims under 35 U.S.C. §§102 or 103. If the Examiner was not persuaded that the Koyanagi patent is not prior art to the present application, the Examiner is respectfully requested to clarify and explain how Koyanagi qualifies as prior art under Title 35 U.S.C. with respect to this application.

**Conclusion**

For at least the foregoing reasons, Applicant respectfully requests reconsideration of the present application. If the Examiner believes any issues could be resolved via a telephone interview, the Examiner is invited to contact the undersigned at the telephone number listed below.

Aside for the electronically submitted fees for the extension fees and the additional claims, no fees are believed due concurrently with the filing of this Amendment. Should any additional fees be required, please consider this a request therefor and authorization to charge Deposit Account No. 50-5063 as necessary.

Respectfully submitted,

June 4, 2010  
Date: \_\_\_\_\_

/JCS/

---

Jonathan C. Siekmann, Reg. No.58,259  
Level 3 Communications, LLC  
1025 Eldorado Blvd.  
Broomfield, CO 80021  
(720) 888-2140